
1.2 Supported xenon bulb lamps

Supported xenon bulb lamps (without lamp house)

Lamp	Type	Order info
Osram xenon bulb lamp of 4 kW	4kW DHP	R9855937
Osram xenon bulb lamp of 3 kW	3kW DHP	R9855938
Osram xenon bulb lamp of 1,2 kW	1,2kW DHP	R9855959
Osram xenon bulb lamp of 2 kW	2kW DHP	R9855956
Ushio xenon bulb lamp of 4 kW	DXL40BAF	R9855939
Ushio xenon bulb lamp of 3 kW	DXL30BAF	R9855940
Ushio xenon bulb lamp of 2 kW	DXL20BAF	R9855955
Ushio xenon bulb lamp of 1,2 kW	DXL12BAF	R9855961

2. XENON BULB LAMP REPLACEMENT PROCESS

About this chapter

This chapter describes how to replace the xenon bulb lamp in the lamp house. Also included are the procedure to reset the lamp parameters, which is required after a xenon bulb lamp replacement, and the procedure to realign the lamp in its reflector for optimal performance.

Overview

- Removal of the lamp house
- Removal of the xenon bulb lamp
- Installation of the xenon bulb lamp
- Installation of the lamp house
- Resetting the lamp parameters
- Realignment of the lamp in its reflector

2.1 Removal of the lamp house



WARNING: This procedure may only be performed by qualified technical service personnel.



CAUTION: Lamp casing is very hot after operation. To avoid burns, let the projector cool down for at least 15 minutes before proceeding to the lamp unit replacement.



CAUTION: Due to its high internal pressure, the lamp may explode in either hot or cold states if improperly handled.

Necessary tools

7 mm flat screw driver.

How to remove the lamp house of the projector ?

1. Switch off the projector.
2. Remove the lamp cover.
3. Release the three spring lock screws of the lamp house as illustrated.

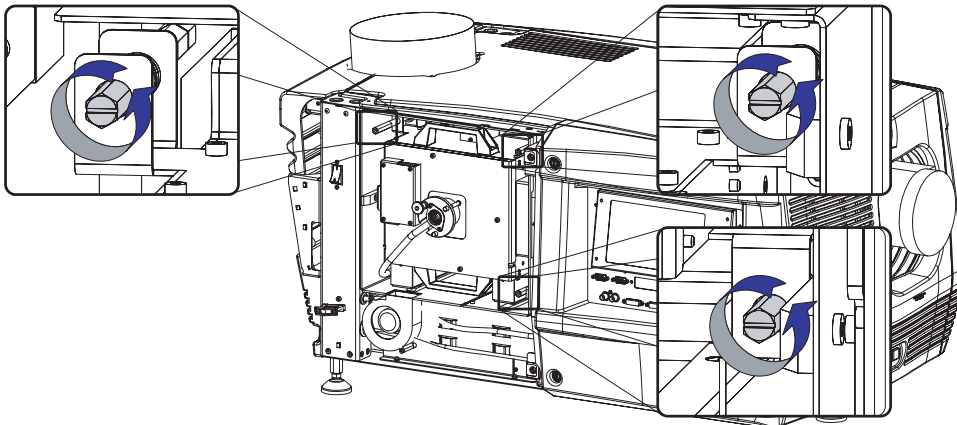


Image 2-1

4. Hold fast the lamp house by the handles and pull the lamp house out of the projector.
Caution: Beware of the weight of the lamp assembly. Take the necessary precautions to avoid personal injury.

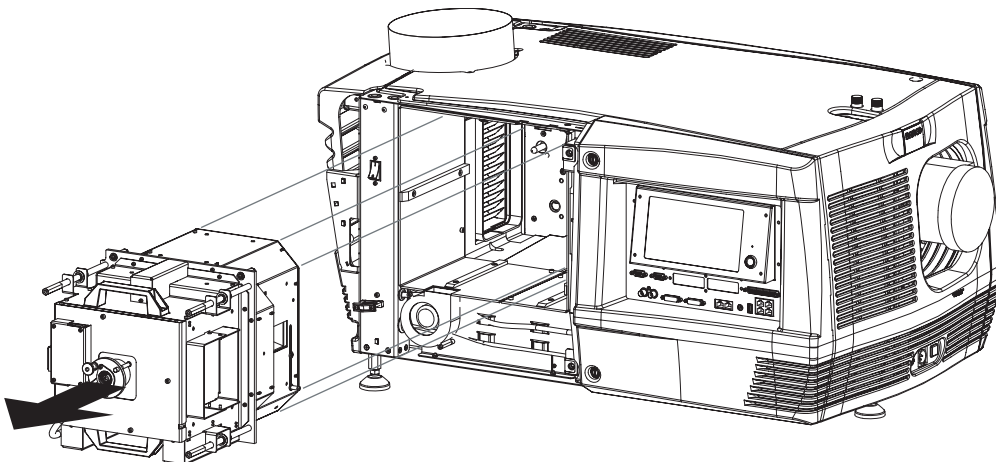


Image 2-2

5. Place the lamp house on a stable support.



While starting up the projector, the electronics detect if a lamp is installed. If no lamp is installed, it is not possible to start up the projector.

2.2 Removal of the xenon bulb lamp



WARNING: DO NOT PERMIT UNAUTHORIZED PERSONNEL TO PERFORM OR ATTEMPT ANY PHASE OF XENON BULB LAMP HANDLING OR SERVICE.



WARNING: This procedure may only be performed by qualified technical service personnel.



CAUTION: Xenon compact arc lamps are highly pressurized. When ignited, the normal operating temperature of the bulb increases the pressure to a level at which the bulb may explode if not handled in strict accordance to the manufacturer's instructions. The bulb is stable at room temperature, but may still explode if dropped or otherwise mishandled. Whenever the lamp house, containing a xenon bulb lamp, has to be dismantled or whenever the protective container or cloth has to be removed from the xenon bulb lamp, authorized protective clothing **MUST be worn!**



WARNING: Always wear face protection (full face shield with neck protector) when handling xenon bulb lamps.



WARNING: Always wear protective clothing (welder's jacket) when handling xenon bulb lamps.



WARNING: Always wear clean leather gloves with wrist protectors when handling xenon bulb lamps.

Necessary tools

- 4 mm Allen wrench.
- 17 mm open ended spanner (2 pieces).

How to remove the xenon lamp bulb from the lamp house?

1. Ensure that you wear protective clothing, a full face shield and protective gloves.
2. Remove first the lamps house side cover and then the lamp house UV blocker assembly by releasing the retaining thumbscrews as illustrated. Support the xenon bulb lamp while removing the UV blocker assembly.

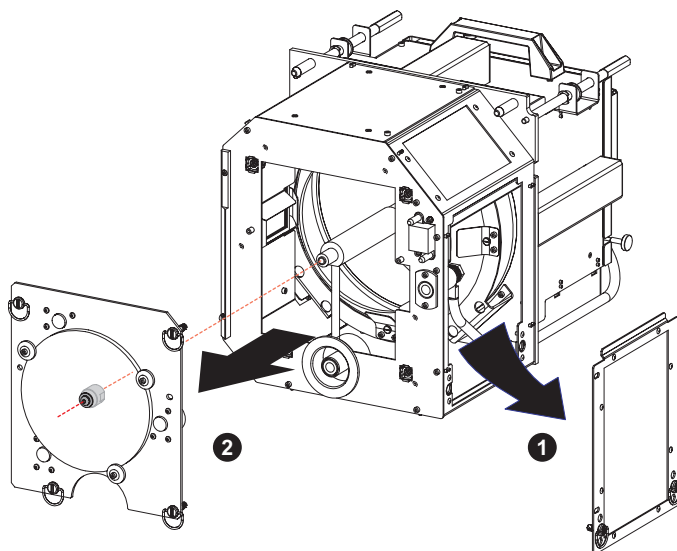


Image 2-3

3. Release the xenon bulb lamp from its socket by removing the hexagon socket head cap screw and plane washer as illustrated. Use a 4 mm Allen wrench.

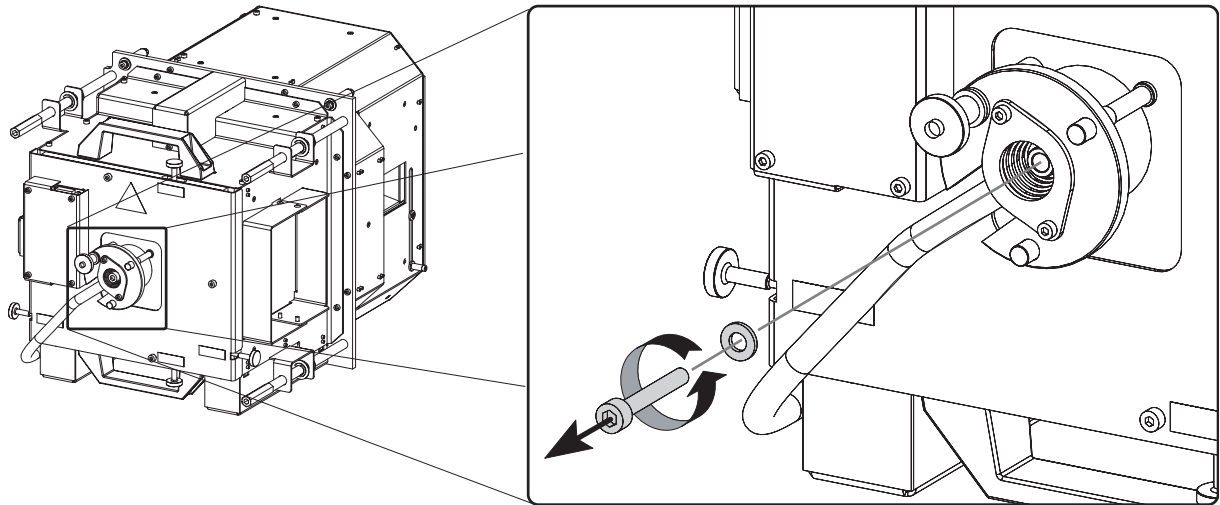


Image 2-4

4. Slide the white anode socket, which is connected via a thick wire with the xenon bulb lamp, upwards away from its position and then remove the xenon bulb lamp with anode socket from the lamp house.

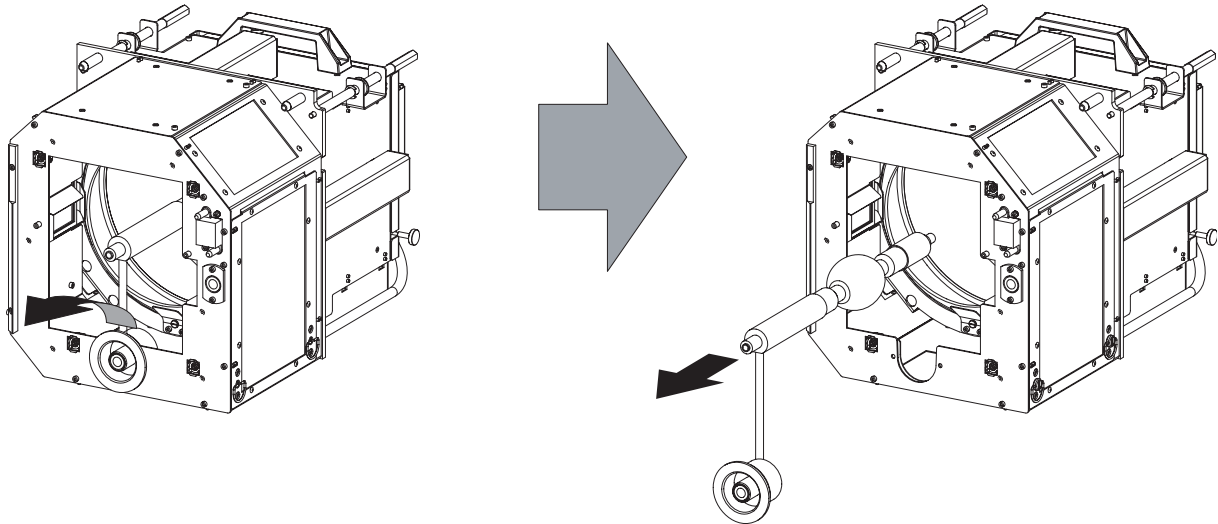


Image 2-5

5. Place the xenon bulb lamp into a protective container or wrap a protective cloth around the xenon bulb lamp.
6. Remove the anode wire lug from the anode socket. Use for that two open ended spanners of 17 mm. Hold fast the nut N1 with one spanner while releasing the nut N2 with the other spanner. Note that a plane washer (W1 & W2) is provided on both sides of the anode wire lug (L).

2. Xenon bulb lamp replacement process

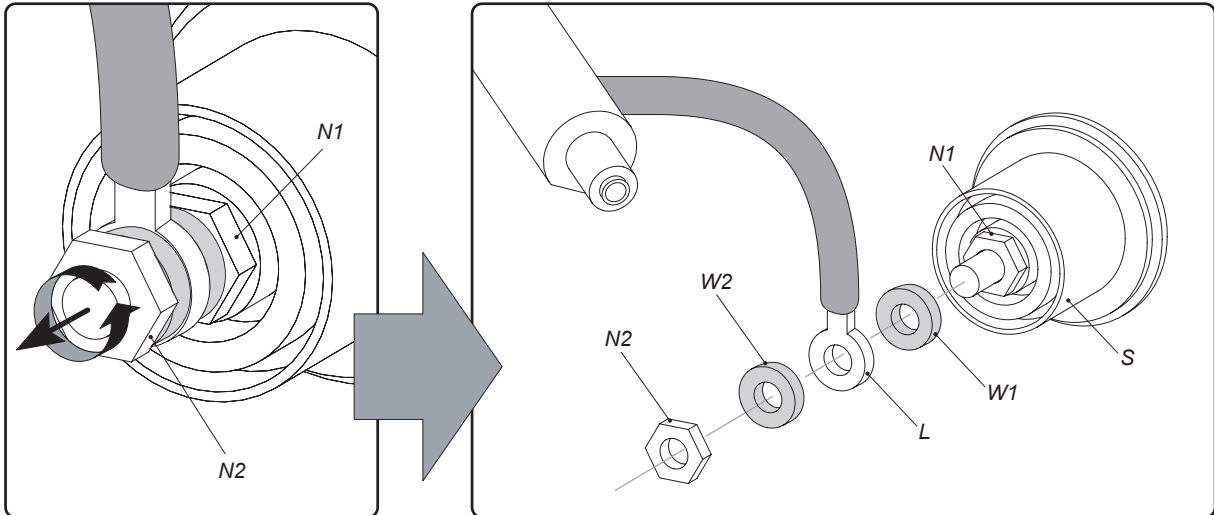


Image 2-6

7. Remove the cathode lamp adaptor (A) from the xenon bulb lamp (L) as illustrated. Use a 4 mm Allen wrench to release the fixation screw (S) of the adaptor.

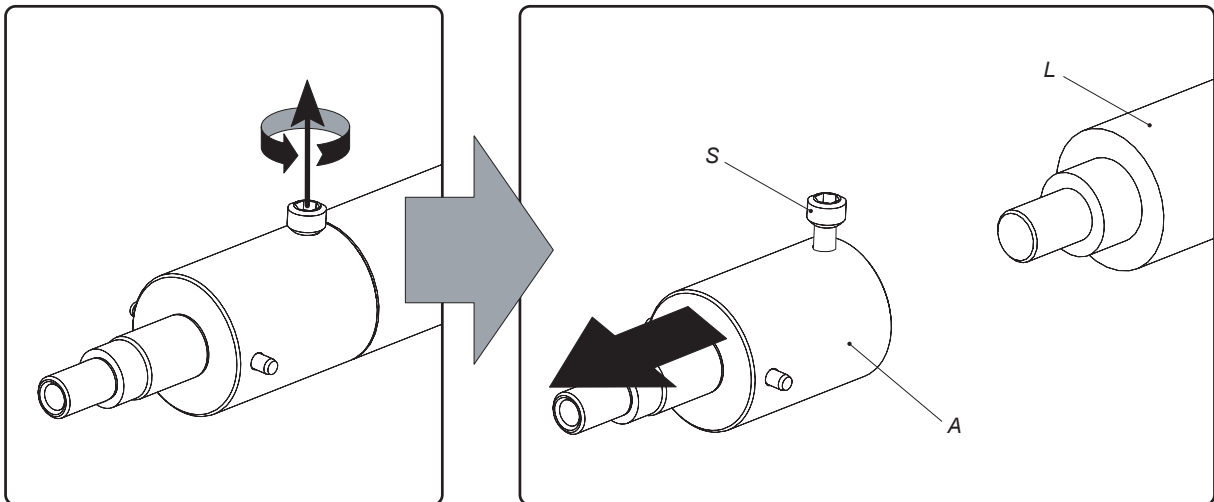


Image 2-7



CAUTION: Expired xenon bulb lamps.

Dispose of expired bulbs that are beyond warranty in the following manner: wrap the bulb tightly in several layers of canvas or heavy cloth. Place it on hard surface and shatter the envelope with a sharp hammer blow. **DO NOT** place a non shattered bulb in any ordinary refuse container.



When returning a xenon bulb lamp for warranty adjustment, pack it in its original shipping container. Complete and return all required warranty information.

2.3 Installation of the xenon bulb lamp



WARNING: DO NOT PERMIT UNAUTHORIZED PERSONNEL TO PERFORM OR ATTEMPT ANY PHASE OF XENON BULB LAMP HANDLING OR SERVICE.



WARNING: This procedure may only be performed by qualified technical service personnel.



CAUTION: Xenon compact arc lamps are highly pressurized. When ignited, the normal operating temperature of the bulb increases the pressure to a level at which the bulb may explode if not handled in strict accordance to the manufacturer's instructions. The bulb is stable at room temperature, but may still explode if dropped or otherwise mishandled. Whenever the lamp house, containing a xenon bulb lamp, has to be dismantled or whenever the protective container or cloth has to be removed from the xenon bulb lamp, authorized protective clothing **MUST be worn!**



WARNING: Always wear face protection (full face shield with neck protector) when handling xenon bulb lamps.



WARNING: Always wear protective clothing (welder's jacket) when handling xenon bulb lamps.



WARNING: Always wear clean leather gloves with wrist protectors when handling xenon bulb lamps.



The DP-1200/DP-1500/DP-2000 projector is delivered without xenon bulb lamp installed. This procedure also assumes that the lamp house is closed and that there is no xenon bulb lamp installed inside the lamp house.

Necessary tools

- 17 mm open ended wrench.
- Torque wrench with 17 mm hexagon socket
- Torque wrench with 5 mm Allen socket.

Necessary parts

- Lamp cathode adapter.
- Hexagon socket head screw M6 x 40.
- Plane washer.

How to install the xenon bulb lamp into the lamp house?

1. Ensure that you wear protective clothing, a full face shield and protective gloves.
2. Remove the UV blocker and side cover of the lamp house by releasing the retaining thumbscrews as illustrated.
Note: In case of a lamp replacement, the UV blocker will be already removed.

2. Xenon bulb lamp replacement process

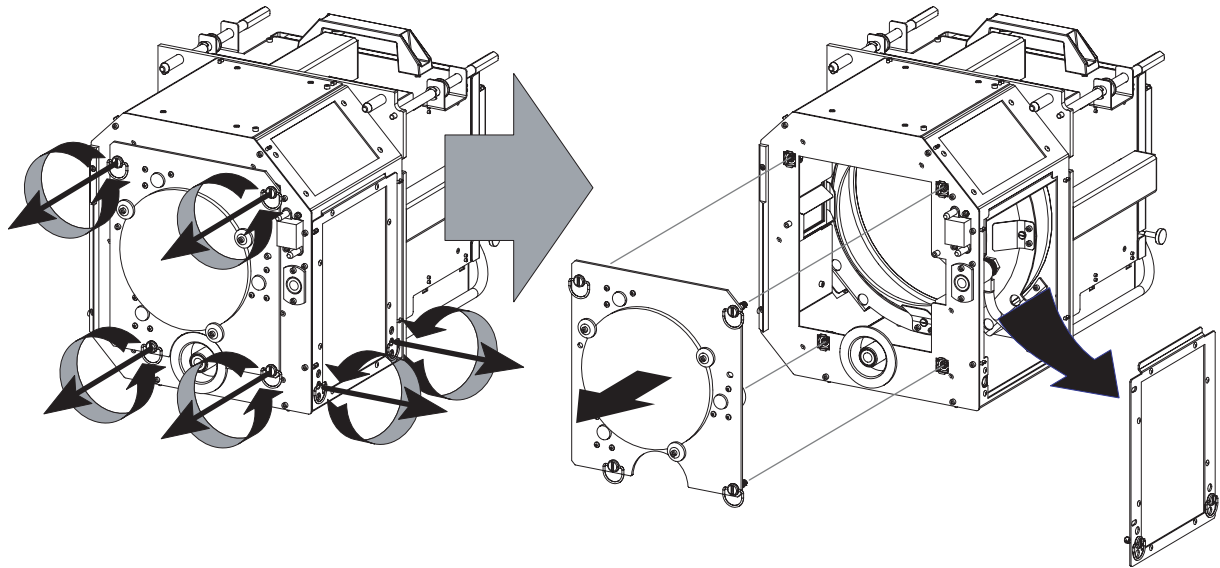


Image 2-8

3. Install the lamp cathode adaptor (A) upon the xenon bulb lamp (L) as illustrated. Use torque **2,5 Nm** to fasten the fixation screw (S) of the adapter. Use for that a torque wrench with a 5 mm Allen socket. Make sure that there is full contact between the cathode adaptor and the lamp base.

Note: The cathode lamp adaptor is delivered in a separate bag with the projector. In case of a lamp replacement you have to reuse the adaptor from the xenon bulb lamp which you want to replace.

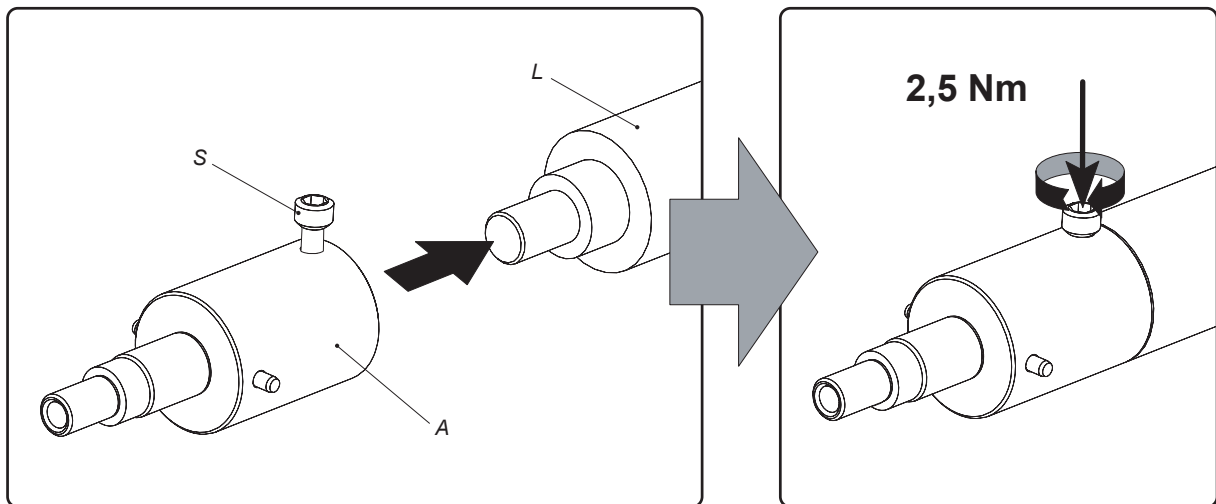


Image 2-9

4. Install the anode wire lug (L) upon the anode socket (S). Hold fast the nut N1 with an open-end wrench while fastening the nut N2 with a torque of **9 Nm** using a torque wrench. Ensure that at both sides of the wire lug L a plane washer (W1 & W2) is present.

Note: The anode socket is located just below the UV blocker and can easily be removed from the lamp house. In case of a lamp replacement you have to reuse the anode socket which is connected to the xenon bulb lamp which you want to replace.

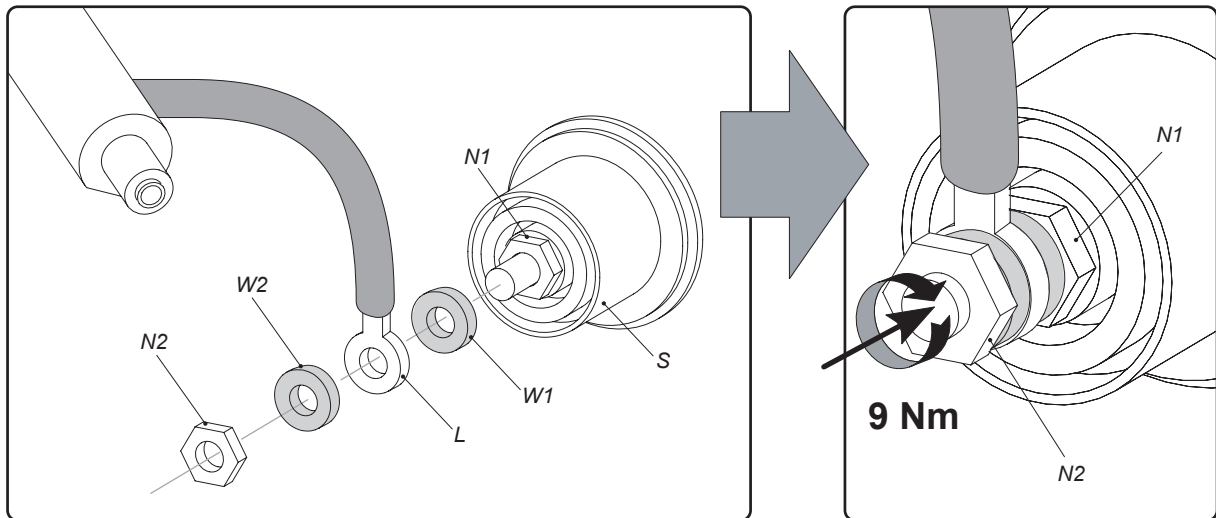


Image 2-10

- Remove the protective container or unwrap the protective cloth from the xenon bulb lamp.

Warning: Ensure that you wear protective clothing, a full face shield and protective gloves.

Tip: Write down the serial number of the lamp. You will need this while updating the lamp parameters after installation of the lamp. The serial number of the lamp is engraved in the neck of the xenon bulb lamp.

- Gently guide the xenon bulb lamp into position inside the lamp house as illustrated. Anode socket hanging vertical down. While inserting the lamp, rotate it slightly, engaging the pins of the cathode adapter in the foreseen slots. This is to ensure the lamp cathode is completely inserted.

Warning: Make sure that the both pins of the cathode adapter are engaged in the foreseen slots.

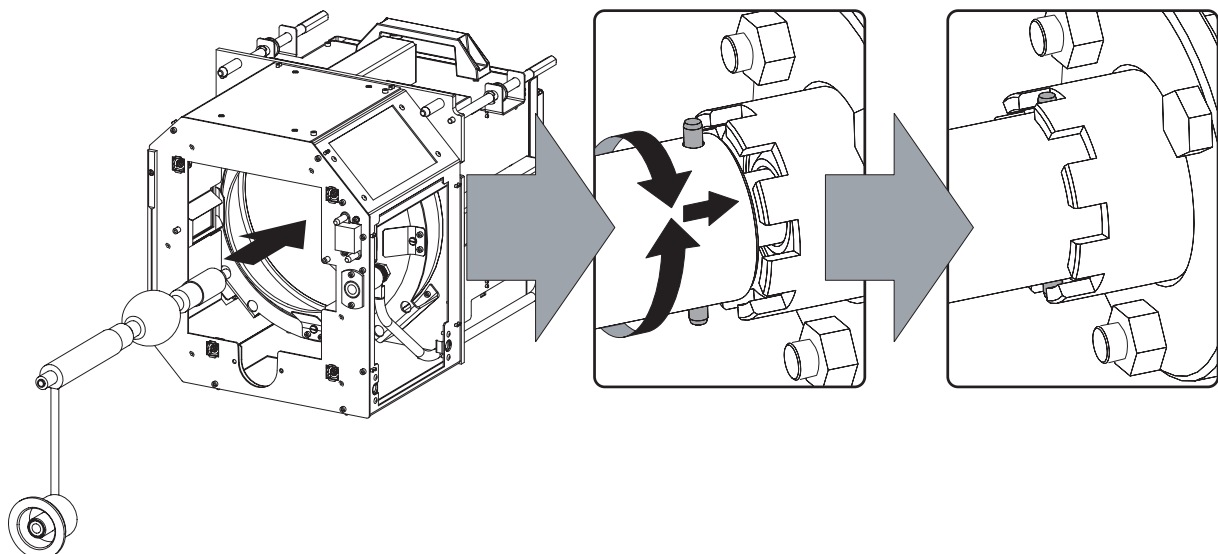


Image 2-11

- Insert the anode socket into position as illustrated.

Caution: Avoid any tension on the anode wire, so there is no mechanical stress on the bulb of the lamp.

2. Xenon bulb lamp replacement process

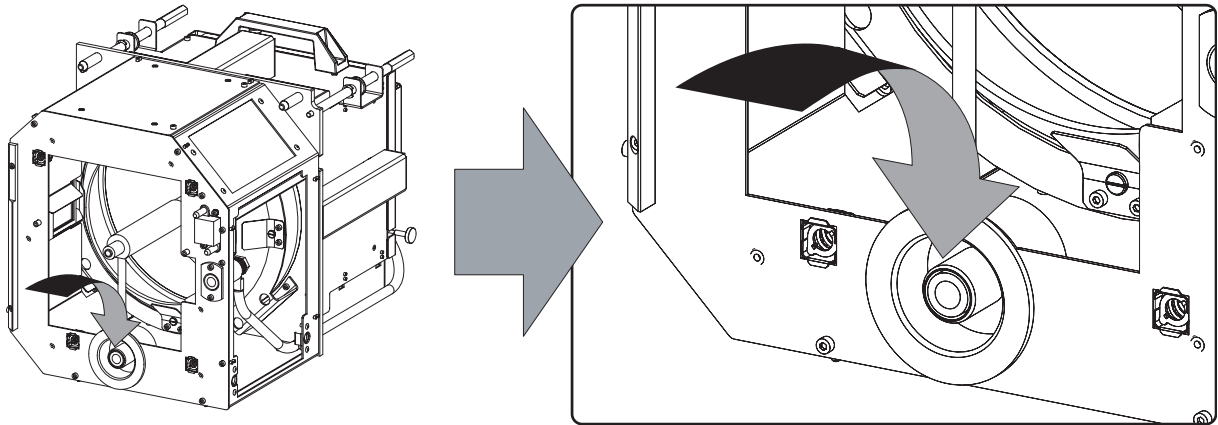


Image 2-12

8. Reinstall the UV blocker assembly as illustrated. Make sure that the xenon bulb lamp is properly supported by the lamp supporting mechanism in the centre of the UV blocker. Use the opening at the side of the lamp house to guide the supporting pin of the xenon bulb lamp into the anode supporting mechanism.

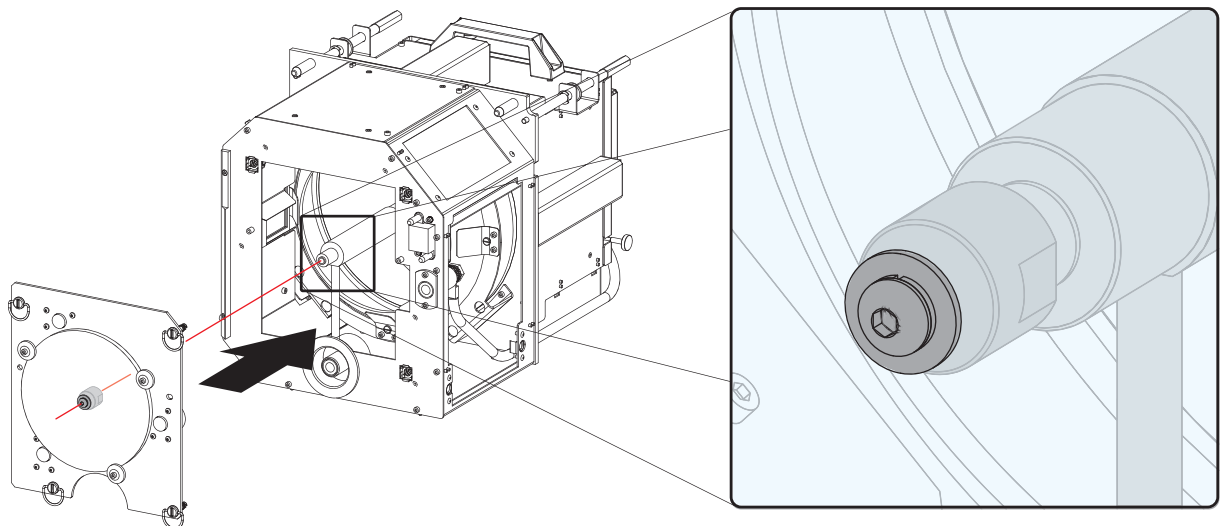


Image 2-13

9. Secure the UV blocker by fastening the four thumbscrews as illustrated.

Note: Please ensure that the thumb screws turning wires are flush with the cover or interference will occur while inserting the lamp house into the projector.

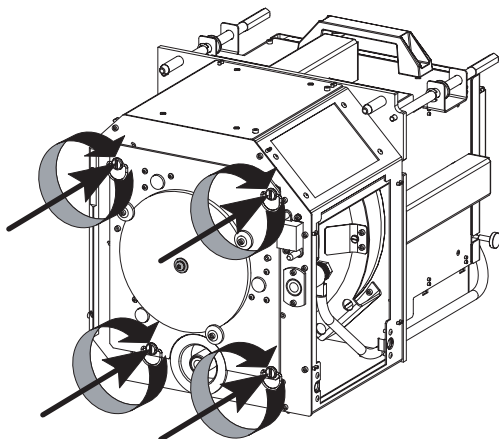


Image 2-14

10. Fasten the cathode side of the xenon bulb lamp using a hexagon socket head screw M6 x 40 and a plane washer as illustrated. Use a torque of **2,5 Nm** to fasten the hexagon socket head screw. Use for that a torque wrench with a 5 mm Allen socket.

Caution: Make sure that the both pins (reference A of image 2-15) of the cathode adapter remain engaged in the foreseen slots. Therefore, use one hand to keep the xenon bulb lamp into position while inserting the hexagon socket head screw.

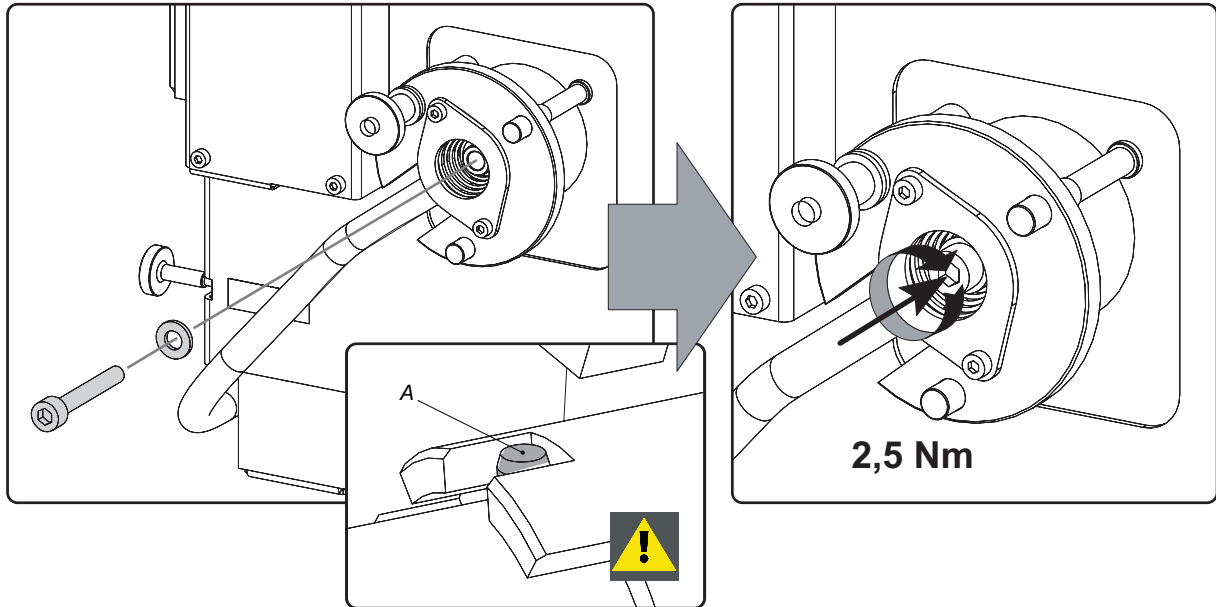


Image 2-15

11. Reinstall the side cover of the lamp house as illustrated.

Note: Please ensure that the thumb screws turning wires are flush with the cover or interference will occur while inserting the lamp house into the projector.

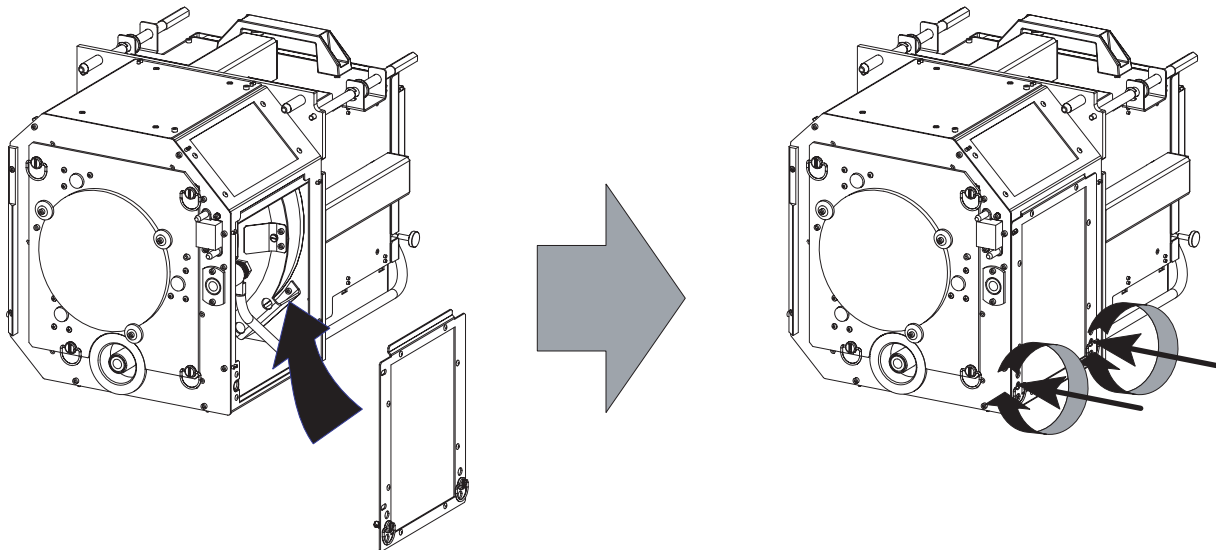


Image 2-16



CAUTION: The "LAMP INFO" parameters which are stored on a chip inside the lamp house **MUST** be updated after each installation of an xenon bulb lamp inside the lamp house. Neglecting this update will result in poor performance and short life time of the xenon bulb lamp. See procedure "Resetting the lamp parameters", page 20.



A realignment of the xenon bulb lamp in its reflector is required after the installation of the xenon bulb lamp in the lamp house. See procedure "Realignment of the lamp in its reflector", page 21.

2.4 Installation of the lamp house



WARNING: This procedure may only be performed by qualified technical service personnel.



CAUTION: Due to its high internal pressure, the lamp may explode in either hot or cold states if improperly handled.

Necessary tools

7 mm flat screw driver.

How to install the lamp house of the projector ?

1. Ensure the projector is switched off.
2. Remove the lamp cover.
3. Hold fast the lamp house by its handles and gently slide the lamp house into its socket. Note that the compartment is provided with guides (G) to position the lamp house correctly.

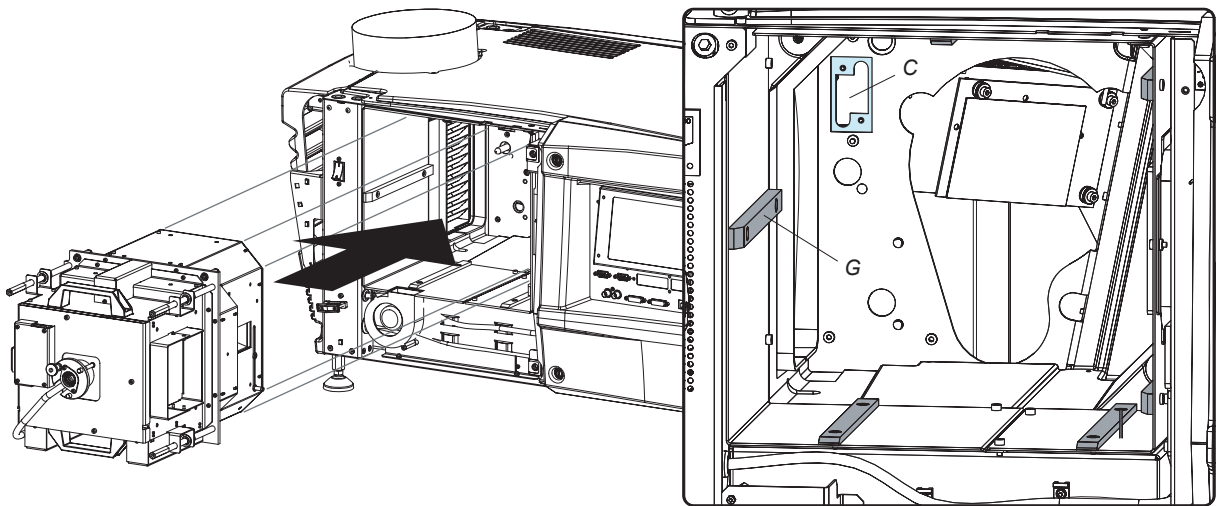


Image 2-17

4. Push the lamp house forward until it slides fully into the projector.
5. Secure the correct position of the lamp house by tightening all three spring lock screws as illustrated.

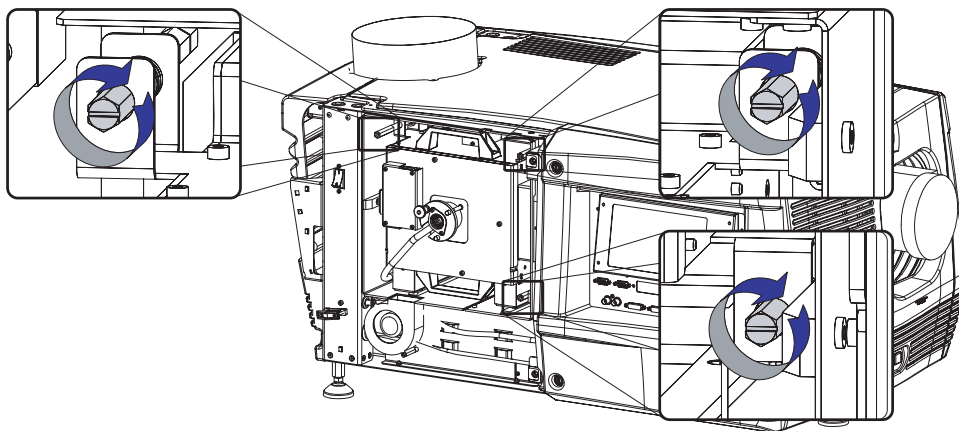


Image 2-18

6. Reinstall the lamp cover of the projector.



While starting up the projector, the electronics detect if a lamp is installed. If no lamp is installed, it is not possible to start up the projector.

2.5 Resetting the lamp parameters



CAUTION: The “LAMP INFO” parameters which are stored on a chip **MUST** be updated after each installation of an xenon bulb lamp inside the lamp house. Neglecting this update will result in poor performance and short life time of the xenon bulb lamp.

How to reset the lamp parameters?

1. Start up the projector but do not ignite the lamp.
2. Go via the **Communicator** touch panel to the menu “Installation” > “Lamp” > “Lamp information”.
3. While the *Lamp information* window is displayed, tip on **Reset** (1).
A reset message is displayed (2).
4. Fill out the article number of the new lamp (3a)
Or,
click on **Select** (3b) to display a list of possible article numbers (4). Select a article number (5) and click **OK** (6).
The software will check if the entered article number is a valid number (7).
5. Fill out the serial number of the lamp (8).
6. Click **Reset** (9).

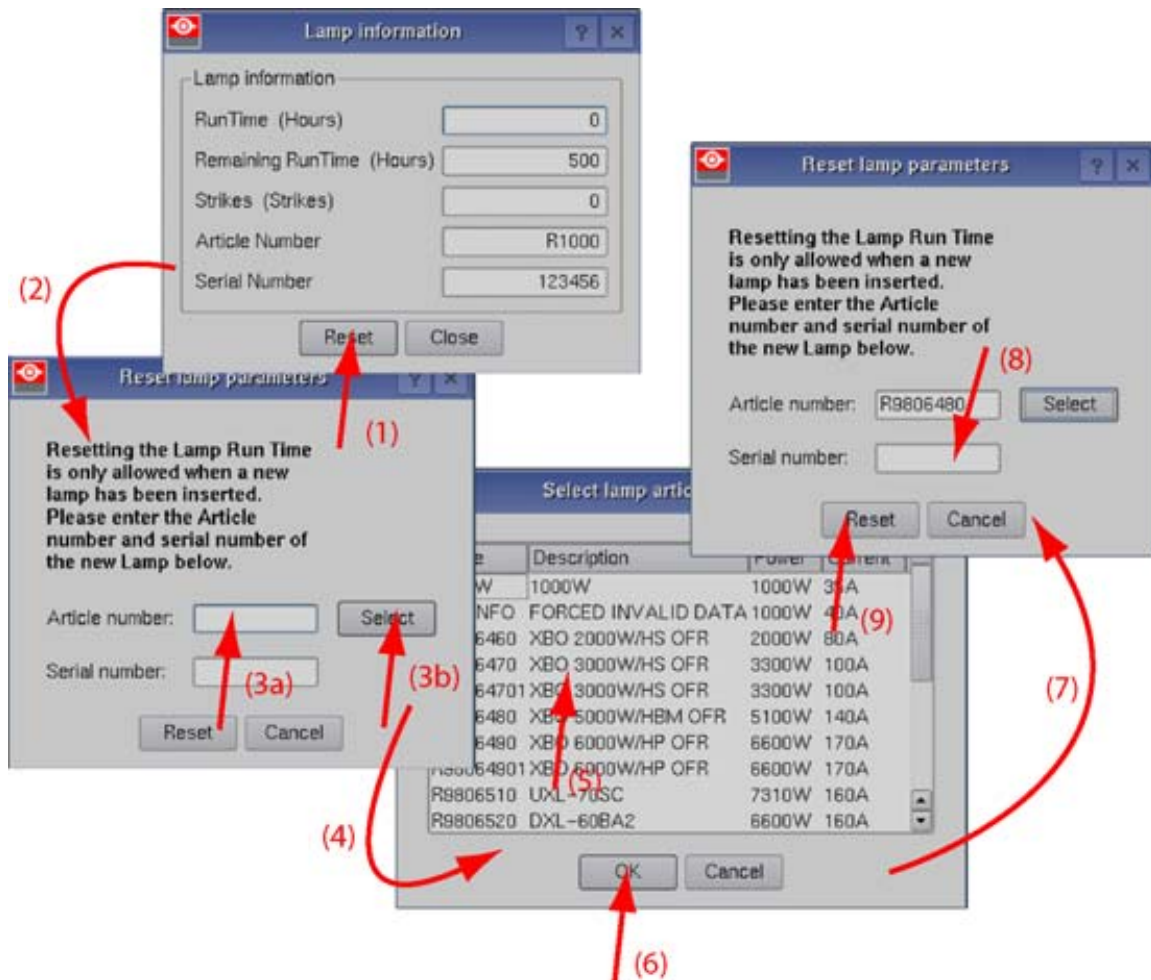


Image 2-19
Reset lamp info



CAUTION: For more information about using the Communicator touch panel consult the user's guide of the communicator touch panel.

2.6 Realignment of the lamp in its reflector



Each xenon bulb lamp installation requires a realignment of the lamp in its reflector for optimal performance of the xenon bulb lamp in the DP-1200/DP-1500/DP-2000 projector. Furthermore, it is recommended to realign the lamp after the first run time of 100 and 200 hours. Especially the Z-axis of the lamp.



WARNING: This procedure may only be performed by qualified technical service personnel.

How to realign the lamp in its reflector?

1. Remove the cover of the lamp compartment to gain access to the X-, Y-, and Z-axis adjustment thumbscrews of the lamp.
2. Switch on the projector and start up the lamp.
3. Go via the Communicator touch panel to the menu “Installation” > “Lamp” > “Light output”.
4. Set the “Light output mode” in **normal mode** and the “Lamp Dimming” on maximum (255).

Note: This window on the Communicator touch panel shows in the upper left corner the measured value of the built-in light sensor of the projector.

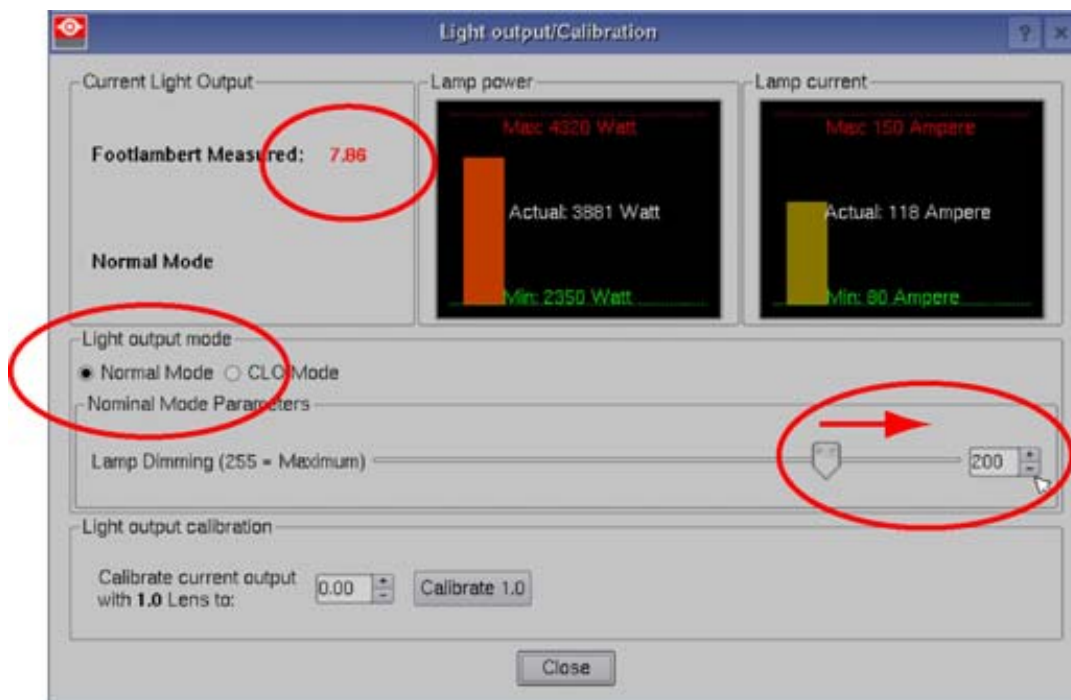


Image 2-20

5. Release the X-axis lock thumb screw (ref LX image 2-21) and Y-axis lock thumb screw (ref LY image 2-21).
6. Adjust the X-axis (ref X image 2-21), the Y-axis (ref Y image 2-21) and the Z-axis (ref Z image 2-21) for maximum current light output (Footlambert Measured). Carefully turn the thumbscrew for maximum light output. Once over the maximum, turn slightly in opposite direction to reach the maximum light output again. Do this for each direction and minimum repeat this adjustment cycle twice.

2. Xenon bulb lamp replacement process

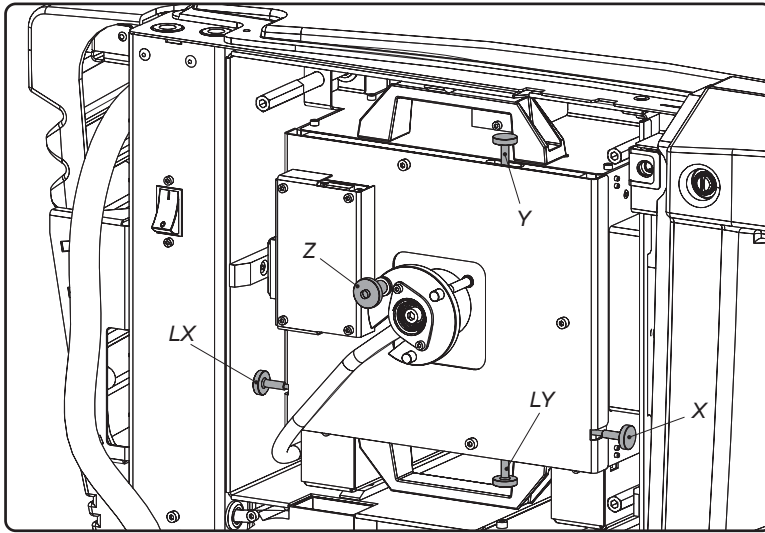


Image 2-21

7. Fasten the X-axis lock thumb screw (ref LX image 2-21) and Y-axis lock thumb screw (ref LY image 2-21).
8. Switch off the projector.
9. Reinstall the cover of the lamp compartment.

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